SINIE DOCUMENTS

MONTANA

INDUSTRIAL ACCIDENT BOARD 42ND ANNUAL REPORT

JULY, 1956 - JUNE, 1957

MEMBERS OF THE BOARD

ROBERT F. SWANBERG, Chairman

OLIVER SULLIVAN, Commissioner of Labor and Industry

ALBERT H. KRUSE, Commissioner of Agriculture

W. W. CASPER, Secretary

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ROBERT F. SWANBERG Chairman Albert H. Kruse Oliver Sullivan



STATE OF MONTANA INDUSTRIAL ACCIDENT BOARD

HELENA, MONTANA

January 20, 1958

Honorable J. Hugo Aronson

Governor

Dear Governor Aronson:

Pursuant to Section 92-842, Revised Codes of Montana, 1947, we are transmitting, herewith, the forty-second annual report of the Industrial Accident Board.

Yours truly,

/s/ Robert F. Swanberg
Chairman

/s/ Oliver Sullivan
Commissioner

/s/ Albert H. Kruse Commissioner

ATTEST:

/s/ W. W. Casper
Secretary

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The activities of the Montana Industrial Accident Board during its forty-second year of operation is described in the following summary and statistical tables.

The 35th Legislative Session confirmed the re-appointment of Robert F. Swanberg, Chairman of the Industrial Accident Board, Albert H. Kruse, Commissioner of Agriculture and ex-officio member of the Industrial Accident Board, and Oliver Sullivan, Commissioner of Labor and Industry and ex-officio member of the Industrial Accident Board. Mr. Sullivan continues as a Treasurer of the Board.

LEGISLATIVE CHANGES

The 35th Legislative Session made various changes in the operation and administration of the Workmen's Compensation Act and also in the benefits provided by the Act. These changes are outlined briefly below:

The 35th Legislative Session made provision for an Industrial Administration Fund which shall consist of:

- 1. Fees for copies of papers and records and charges for publication issued by the Board.
- 2. An assessment in an amount not to exceed 2/100 of 1% on the annual payroll for the preceding year of employers enrolled under Plan I.
- 3. An assessment in an amount not to exceed 1 3/4% of the gross annual direct premiums collected in Montana on policies of insurance insuring employers who elect to be bound by Plan II.
- 4. All fees paid for inspection of boilers and issuance of licenses to operating engineers.
- 5. An assessment in an amount not to exceed 10% of the gross annual direct premium of the Industrial Insurance Fund.

The Industrial Administration Fund shall be divided into two accounts. First, the General Account which shall be credited with the fees described in items (1), (2), (3), and (4), and 38% of the assessments in item (5) above. The General Account shall be debited with the expenses incurred by the Board in the General Administration of the provisions of the Workmen's Compensation Act. Second, the Industrial Insurance Fund which shall be credited with 62% of the assessment described in item (5) above. The Industrial Insurance Fund shall be debited with all expenses incurred in the administration or operation of the Industrial Insurance Fund.

These changes had the effect of transferring the cost of operation of the Workmen's Compensation Act from the General Fund to a self-sustaining Industrial Administration.

The fee for filing a Plan II policy was abolished.

The 35th Legislative Session provided for an increase in benefits provided the injured workman, his beneficiaries and heirs.

The payment of burial expense was increased to provide payment of reasonable burial expenses not to exceed \$500.

The weekly compensation benefits were increased as follows:

Minimum	\$19.50 to	\$25.50
Single	26.50 to	28.00
l Beneficiary	28.50 to	30.50
2 Beneficiaries	29.50 to	33.50
3 "	30.50 to	36.50
<u>}</u>	31-50 to	40.00
5 "	32,,30 50	42.50

The medical and hospital benefits were changed to provide for payment of reasonable hospital and medical services during the first 36 months after the injury not exceeding in amount \$2,500.00. Provided, however, that in case of total disability where the sum of \$2,500.00 is insufficient, the Board may allow such additional amounts as it may deem proper. The monetary limit provided for previously for artificial members was removed.

The specified injury schedule was amended to provide increase in 24 of the 37 specified injuries.

The time limit for giving notice of injury was increased from 30 to 60 days.

Changes in the wording of various other statutes made a change in the benefits due the injured workman, his beneficiaries and heirs.

The legislature further provided that employers insured under Plan III should be issued a policy of insurance and provision was made for the establishment of an experience rating system which would allow discounts to employers with a good experience record.

The name of the Industrial Accident Fund (State Fund) was changed to the Industrial Insurance Fund.

SUPREME COURT DECISIONS

The Supreme Court of the State of Montana handed down four (4) decisions on Workmen's Compensation matters during the 42nd year of the Workmen's Compensation Act.

The first, State of Montana ex rel. Johnston E. Morgan vs. Industrial Accident Eoard (13 St. Rep. 229) pertained to coverage of employers covered under Plan III of the Workmen's Compensation Act who had employees working outside the State of Montana.

The second, Leslie J. Moffett vs. Industrial Accident Board (13 St. Rep. 253) pertained to the Powers of the Industrial Accident Board to rescind, alter, or amend an order approving a full and final compromise settlement of compensation.

The third, O'Bannon vs. Gustafson (13 St. Rep. 335) pertains to the filing of a timely Claim for Compensation and the unconstitutionality of a section of the Workmen's Compensation Act.

The Tourth, Jeffries Coal Co. vs. Industrial Accident Board (14 St. Rep. 373) pertains to the premium assessments of employees allegedly working for an Independent Contractor.

PROCEDURES AND PERSONNEL

In order to process the vast amount of correspondence and the great number of reports received in the processing of the accidents and claims, the Board found it necessary to make several procedural changes, such as:

- (a) The physical make-up of the accidents and claims have been changed to facilitate easier recognition and prompt handling.
- (b) The administrative procedure involved in the payments of warrants was changed in order to reduce delay in payment of claims.
- (c) An increase in field inspections was instituted in order to keep the Claims Department informed of the current status of each claim.
- (d) Procedures were changed to allow for the setting of claim reserve on an individual claim basis.
- (e) A Hearing Officer was added to the Board's staff to speed the adjudication of disputed claims, and provisions have been made to add further field auditors and inspectors.
- (f) The space problem became acute and plans were made for a revision of office space and a new and more efficient filing system.
- (g) The necessary plans were made to change from a manual bookkeeping system to a modern high speed machine-operated system of accounting and recording claims.
- (h) Other procedural changes were made to correlate the clerical duties and machine operation in order to achieve a greater degree of accuracy and efficiency.

In addition to the changes and plans stated above, the Board secured the services and advice of actuaries in the modernization of the general administrative structure and to advise or recommend changes necessary to accurate underwriting of premium classifications and premium rates.

Turnover in personnel was not too great, and the duties of some of the personnel were changed in order to take advantage of their experience and training.

RULES AND REGULATIONS

As new and more complete medical fee schedule was released after consultations with the Economics Committee of the Montana Medical Association.

A conmittee appointed by the Board to compose a safety code for the Constituation Industry completed the code and it is now in effect.

The premium classification for logging and sawmills under the State Puri was divided effective Ally 1, 1957. The new classifications provide for coparate rance on logging and sawmill operations.

BENEFITS PAID

Benefits paid by Plan III (State Fund) exceeded the three million mark during the 42nd fiscal year with a total of \$3,045,115.74, an increase of over a quarter million dollars.

Benefits paid under Plan II (private carriers) totaled \$1,389,841.38, a decrease of about \$62,000.00 as compared to last year.

Benefits under Plan I (self-insured) were up about \$125,000.00 with a total of \$836,734.06.

SECOND INJURY FUND

Fifteen deaths of single persons with no dependents brought the Second Injury a total of \$7,500. The cash balance on June 30, 1957, was \$22,535.02.

One new claim was charged against the fund.

The total claim liability at the end of the fiscal year was \$17,396.84, virtually no change from a year ago.

RATES

The increase in benefits authorized by the legislature and the continued high degree of frequency and severity of accidents made necessary an increase in many premium rates. This was true in both the private carrier rates and State Fund rates. The State Fund increased almost one-half (48%) of the classifications. Changes ran from \$.05 to \$6.50 per hundred dollars payroll. Losses under the State Fund are, of course, due in part to the fact it does not have the power to select or reject risks and coverage under the State Fund in some instances, is mandatory.

COVERAGE

The number of firms covered by Workmen's Compensation in Montana at the close of the Forty-second fiscal year was again higher than the preceding year but to a minor degree. The total in June 30, 1957, showed 13,054 firms enrolled under the Act as compared to 13,019 a year ago.

Plan I enrollment showed no change.

Plan II coverage showed a decrease of 600 accounts with a total of $3,97^{l_+}$.

Plan IIII closed up a total of 645 new enrollments for a grand total of 9,024.

ACCIDENTS REPORTED

Accordance re-orded with a rotal of 2,055; under Plus II the now of 3,056; under Plus II the now of 3, accidents reported was down about 6% with a total of 7,242. This is no doubt due to some degree to the decrease in coverage under Plan II.

Plan III showed an increase of 7% with a total of 11,718. Again, it is to be noted that coverage under Plan III showed a sizable increase.

Unfortunately figures are not available with which to make an accurate frequency rate or comparable comparison. A table has been prepared, however, to show the total injuries by industry. All data was taken from the first report of injury.

CLAIMS FILED

The total number of claims filed by all plans of coverage were down about 2% with a combined total of 3,624.

Claims for Plan I were down 7% with a total of 936 claims filed; Plan II claims were down 10% with a total of 1,117; and Plan III showed an increase of about 7% with a total of 1,571.

ACCIDENT TYPE

Struck by or striking against objects was the most common type of accident, accounting for a total of 9,361 or 44.5% of all accidents reported. A year ago 8,723 or 45% of the years' total were charged to this type.

Slips and falls were down slightly with 4,326 (20.6%) as compared to 4,496 or 21.5% a year ago.

Strain or overexertion showed no change percentage wise (12.4% of all cases for both years) and almost no change in the actual total: 2,612 cases were reported this year, as compared to 2,590 reported a year ago.

Caught in, on, or between objects or machines also indicated no change in per cent of total, and virtually no change in the total cases charged to this type. A total of 1,386 cases were reported this year as compared to a total of 1,365 reported last year.

As in the agency group, the change noted in total cases charged are not indicative of any alarming increase or commendable decrease in any one category or type.

AGEMCY

Working surfaces were again in first place as crippling agency with a total of 3,220 cases reported or 15.3% of all cases reported. A year ago the figures for this same category were 3,204 or 15.4% of the total cases reported.

Hand tools remained in second place as the most common agency with a total of 2,739 or 13% of all cases reported. Here again little change was noted. Last years' figures for this category were 2,701 or 12.9% of the total.

Trees, logs, and lumber with 1,581 (7.5%) showed a slight decrease from a year ago when 1,657 or 7.9% were charged to this major agency group.

Machines showed a slight decrease, 1,409 or 6.7% as against 1,476 or 7.1% a year ago.

Vehicles were down also, with a total of 1,148 (5.5%) as against 1,421 or 6.9% a year ago.

Flying particles, unassigned to a parent agency indicated an increase from 1,102 (5%) a year ago to 1,269 or 6% this year.

The degree of change that is noted in this years' figures does not indicate any significant shift to any category.

MATURE OF INJURY AND BODY PART AFFECTED

Strains, sprains, and dislocations represented 27.4% of all injuries with a total of 5,760. A year ago 27% was charged to this nature of injury.

Cuts, lacerations, and punctures, totaled 4,683 or 22.3% of all injuries with only 0.2% change from a year ago.

Bruises and contusions were reported in 3,319 cases, 15.8% of the total. A year ago, 16.3% of all injuries were classified as bruises and contusions.

Little change was noted in the body part affected. The back and spine was affected in 3,673 cases or 17.5% of the total; eye injuries accounted for 2,654 or 12.6%.

Injuries to the upper extremities occurred in 1 cut of every 3 cases reported; 1 in 5 injured, the lower extremities.

FATAL ACCIDENTS

There were 85 deaths reported this year, 8 more than a year ago.

Agriculture and agricultural services had 4 deaths reported, the same as a year ago. Of this total, 3 occured in aerial spraying.

Fatalities in the metal and hardrock mining industry totaled 15, 6 less than a year ago. A total of 5 deaths occurred in the production of petroleum and natural gas and allied contract services reported 5, or 3 more than a year ago.

Contract construction reported 9 deaths, 3 more than a year ago.

Logging and sawmill operations reported 15 deaths, 2 less than a year ago.

Other manufacturing classifications reported 10 deaths, 8 of which occurred in smelting and refining of metals. A year ago, 3 deaths were reported in smelting and refining operations.

Transportation and utilities reported 9 fatalities, 4 more than a year ago.

Trade establishments and governmental agencies reported 7 fatalities each. This was an increase of 3 or more for trade establishments and a decrease of 5 for governmental agencies.

The direct or indirect cause of death in the major industry classifications were found to be as follows:

Agriculture & Agricultural Services

Tractor overturning	1
Plane crash	3

Mineral Extraction

Fall of ground, cave-ins	8
Mine cars, motors	1
Falls into shafts or chutes	4
Cuge	1
Caught in machinery ·	<u>1</u>
Truck accidents	2
Falling equipment	1
Plane crash	1
Heart attack	1

Contract Construction

Caught between moving equipment	1
Equipment overturning	3
Cave-ins or slides	l
Contact with power line	l
Drowning	1
Falls from structures	1
Heart attacks	l

Manufacturing

Explosion and fire	2
Equipment failure	2
Electrocution	1
Falls from equipment	2
Falling or flying material	1
Falling trees or snags	2
Cave-ins or slides of materials	1
Rolling logs	1
Hot or molten chemicals	1
Struck by moving equipment	1.
Caught in machinery	1
Heart attack	6
Other	1

Transportation, Communications, & Utilities

Truck accidents	3
Struck by automobile	1
Caught in equipment	1
Falling equipment	1

Transportation, Communications, & Utilities - cont. Electrocution Structural failure of working surfaces 1 Trade Vehicular accident 2 Suffocation 2 4 Heart attack Finance, Insurance, Real Estate Heart attack, disease 1 Government Vehicular accident 3.

Heart attack, disease

Claims were filed for the benefit of dependents in 65 cases. The number of dependents per case was 3.5. In 59 cases 2 or more dependents were reported.

3

A total of 17 deaths were attributed to heart failure or heart disease, 5 less than a year ago. It is not possible to determine how many will prove to be compensable.

As in previous reports, we have summarized each death case in order to cover as many factors involved as possible. Many could not be tabulated and still retain any great significance. A study of this special summarization prepared from the information reported should be enlightening as to the cause of these accidents, although, in many cases, information was limited and some conclusions are, to a degree, assumptions on our part.

FATALITIES REPORTED BY INDUSTRY July 1956-1957

Ind	ustry	No. Fatals
Ra	Agricultural Services nching raying & pest control (aerial)	<u>4</u> 1 3
Cc Cr	tion tal or hardrock mining al mining ude petroleum & natural gas production ncluding oil & gas field contract serv.)	22 15 1 5
Ge	ruction ghway construction neral construction, not building m construction	9 3 5 1
Ве	ain mill products verages	26 1 1
Ch Pe	od products Logging Sawmills emicals troleum refining elting & refining metals	<u>9</u> 6 1 1 8
Tr Bu	, Communications, & Utilities ucking s lines ectric utilities	9 1 4 2 3
Re Re Au	olesale (sales) tail general merchandise tail food tomobile dealers ting & drinking places	7 1 1 2 2
	ance & Real Estate al estate	$\frac{1}{1}$
	ate Natural resources Highways	<u>7</u> 1 2
Lo	ecal Education Other TOTAL	2 85
	TOTAL	0)

SUMMARY OF FATALITIES MONTANA, 1956-1957 ALL INDUSTRIES

Nature of Injury

History AGRICULTURE & AGRICULTURAL SERVICES

Contributing Factors

Farming & Ranching Head Injuries & Burns

Deceased was driving tractor up a steep slope when he apparently lost control of tractor and it started to roll down hill backwards. He apparently attempted to jump off or fell and his foot caught in the pedals. The weaving motion of the tractor probably kept throwing his head against the wheel. When the vehicle finally came to rest it turned over and caught fire. Although the body was burned, the coroner believed death was due to head injuries. There were no witnesses to the accident. (Ranch Foreman, age 48, Married, One dependent.)

Spraying & Pest Control Not Given

Not Given

Not Given

Deceased was fatally injured as a result of plane crash. There were no witnesses to the accident. (Pilot, age 54, Married, Two dependents.)

Deceased was fatally injured as a result of plane crash. There were no witnesses to the accident. (Pilot, age 31, Married, Four dependents.)

Deceased was circling while waiting for his flagman to come into position. It is believed that he was attempting to pull out of a stall when the plane hit. There were no eye-witnesses but the flagman stated that the motor sounded normal. Plane was consumed by fire. Actual cause could not be accertained. (Pilot, age 23, Single, No dependents.)

Inexperience of operator.
Driving tractor on too
steep a slope.
Possible mechanical failure of tractor.

Unknown

Unknown

Possible mechanical failure.
Possible flying at stalling speed.

Metal or Hardrock Mining Head Injuries

Skull Fracture

Crushing Injuries

Crushing Injuries

Internal Injuries

Fractured Skull and Internal Injuries

History

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* MINERAL EXTRACTION

Deceased was struck by fall of ground while barring down. He was killed instantly. (Miner, age 50, Single, No dependents.)

Deceased was working on a raise when he complained that he was not feeling well and told his partner that he would start down to a lower level. He apparently fainted and fell down manway, fracturing skull. (Miner, Age 46, Married, Three dependents.)

Deceased was working from top of cage, foreman rang for the cage to go down and investigate the work and engineer moved to wrong side. Deceased was caught between the hurricane deck and the dividing wall of shaft. (Shaftman, Single, age 33, One dependent.)

Deceased and his son were working on a stope and he attempted to free a cable on the slusher line before barring down as he had been instructed to do. He was killed by fall of fround. (Miner, age 43, Six dependents, Married.)

Deceased was waiting for train to take him into working areas and stepped out of safety zone. He was struck by passing ore train. Regulations prohibit such action. (Repairman, age 60, Married, Five dependents.)

Deceased was struck by fall of ground, while preparing to timber. Investigation indicates that the place was in good shape and there was no physical condition to indicate unsafe conditions. (Winer, Married, Six dependents, age 51.)

Contributing Factors

Possible unsafe position. Inherent hazard of occupation.

Should have been accompanied by another person. Illness.

Failure of engineer to move to proper side. Engineer should have been alert. Disregard of instructions.

Disregard of instructions, and safety orders. Taking unsafe position.

No means to detect unsafe conditions. Inherent hazard.

Injury
of
Nature

Internal Injuries

Skull Fracture

Crushing Injuries

Fractured Skull and

Internal Injuries

Pulmonary Embolus

Histor<u>y</u>

factor was apparent. Injured died about three Deceased and partner were engaged in blasting bratice when fall of rock occurred. Area was considered to be in good shape and no unsafe (Miner, age 47, Married, Three weeks later. dependents.)

ceased went into dump to put in holes for blasting but had failed to use safety belt provided and as Deceased and partner had some up to the skip dump required by safety regulations. He fell about 55 to free rock that had held up on dump bars. Defeet into the car below. (Shaftman, age 43, Married, Three dependents.)

drawing him into chute. Mand holes were provided climbing between upper chutes when rock gave way A chute had hung up and deceased was apparently and safety regulations required their use. He apparently failed to use hand holds. (Chute Tapper, age 20, Single.)

with the rock. No one saw him fall and it is assumed that he failed to use safety chain. (Chute Tapper, A chute was hung up on the slushing floor. It could not be barred loose so it was freed with one stick of powder and the body of deceased came down Age 31, Single.)

No contributing injury known of. Death attributed to natural causes. (Machinist, age 63, Single.)

Contributing Factors

Inherent hazard of occupation. Failure to observe safety Failure to use safety regulations. belt.

Failure to obey safety Failure to use safety regulations. devices.

Possible failure to use Possible failure to obey safety orders. safety equipment.

Natural Causes.

Contributing Factors	
History	
Nature of Injury	

Mining - cont. Internal Injuries

Deceased and partner had started drilling when back sloughed out. Ground had been rock bolted, but ground was drummy and bolts pulled out. Because of condition of ground men should have tested back before drilling as they had been instructed to do. (Miner, age 37, Single.)

Failure to test ground.

Bad Ground.

Failure to obey safety

rules.

Inherent hazard of industry.

Multiple Fractures and Internal Injuries

Deceased and partner had blasted in order to put in set of timbers. Some two hours before the accident they had barred down and the back of wall rock bolted. As they attempted to move rock to put in a bolt it came loose striking the deceased. Investigation indicated that all precautions had been taken and that the area was considered in good conditions. (Winer, age 48, Single.) Deceased was cleaning up rock to put in a set of timbers when the rock fell from the ceiling strik-ing him in the back. Men were considered safe miners and area was apparently in good condition. It was believed that some air slack occured in the rock causing it to loosen. (Miner, Age 143, Married, Three dependents.)

Multiple Fractures and

Internal Injuries

occupation.

Multiple Fractures

When servicing a 24 inch compressor belt, he somehow got caught up by the belt and was dragged down through the opening in the deck of the housing carrying the belt and fell 40 feet to the ground. Belt should have been shut down before servicing. (Belt operator, age 40, Married, One dependent.)

Disregard of instruc-

tions.

Failure to stop equipment before

servicing.

Air slack in rock. Inherent hazard in

13.

ury
Inji
of
Vature

Coal Mining Broken Neck

Contract Services Crushing Injuries Oil & Gas Field

Not Given

Fractured Neck

Not Given

History

Joy operator, age 44, Married, Three depenattempting to check the area or to take the ground down and it gave way and struck him. unsafe condition. Deceased was apparently loader, deceased had apparently stopped to cake down loose coal and rock with a pick. While engaged in loading with a mechanical Both he and his partner were aware of the dents.)

him. (Cementer, age 29, Married, Four dependents.) Guard rail came through car, fatally injuring Deceased evidently fell asleep while driving and truck went off road hitting guard rail.

the brakes failed on his truck and truck went off killed instantly. (Truck driver, age 55, Single, Deceased was going down hill around a curve when road and down a forty foot ravine. Driver was No dependents.)

working on rig. Information limited. Contributing Deceased was struck by a falling drill block while factors cannot be determined. (Roughneck, age 26, Divorced.)

(Drilling Superintendent, age 44, Married, Two dependents.) Deceased was killed in a crash landing of aircraft in extremely low or no visability.

Contributing Factors

Possible unsafe exposure Loose overhanging rock. to existing hazard.

Possible excessive speed. Possible fatigue.

Possible failure to ade-Faulty brakes on truck. quately maintain equipment.

Not Given.

Poor Visability.

History

Contributing Factors

CONTRACT CONSTRUCTION

Highway, Road, & Street Construction Crushing Injuries

Crushing Injuries

Coronary Occlusion

eneral Construction,

General Construction, Not Building Crushing Injuries

Deceased was raking chips from road when a truck backing up to chip spreader crushed him between truck bed & spreader. Investigation indicated that there was no signal devices or signal man in existence. (Laborer, age 51, Married, Six dependents.)

Lack of signal or warning

devices.

Improper working proced-

ures.

Possible inexperience. Taking unsafe chances

Unsafe exposure to exist-

ing hazard.

While cutting back slope with motor patrol heading down hill, front wheels started to slide in soft dirt. He attempted to back up and the patrol slid sideways and overturned, pinning him underneath. (Patrol operator, age 40, Murried, Three dependents.)

Inherent conditions of

with equipment.

working surface.

While supervising a job deceased collapsed and died as a result of a heart attack. No undue strain or overexertion was in evidence, however, he had been doing some shoveling sometime before. Deceased had had a previous heart attack and had been told by physician to refrain from manual labor. Employer recognized this and did not require that he do any heavy work. (Foreman, age 49, Married, Three dependents.)

strain or over-exertion.

Possible excessive

Pre-existing heart

condition.

Deceased was loading holes with dynamite near the face of a clay cut. Face caved and he was unable to get clear. Efforts to dig him free failed. (Wagondrill operator, age 54, Married, One dependent.)

Ground was wet.
Possible failure to
anticipate hazard.

15.

Nature of Injury

Construction - cont. Electrocution

Crushed Head

Crushing Injuries

Drowning

History

clam shell bucket to the boom of a crame about 7:30 Deceased was assisting another employee to connect

23,000 volt line while the deceased was in contact with cable. (Laborer, age 22, Larried, Two depenp.m. Boom was raised and came in contact with

dents.)

Deceased was moving a pay loader and while shifting

gears, loader started to slide. He had been instructed to drop the bucket in case of trouble, which he

did, but he chose to ride the loader out rather than to jump. Loader went over the bank, killing him

instantly. Road was extremely hazardous, steep, icy, and snow packed and it was snowing heavily. Loader was not equipped with chains. Investigation also

revealed that the operator was inexperienced in op-

erating this type of equipment. (Teamster, age 32, Married, Four dependents.)

lifting position. These instructions were not carried out and in attempting to make the lift the crane overbents, lifting to place in position with actor crane. had been instructed by superintendent to secure a new turned, crushing the deceased. (Ironworker, Foreman, Deceased was foreman over gang erecting false work Was having some difficulty in raising the bent and age 51, Married, No dependents.)

innediately, and was never seen again. (Engineer, age He was wearing an approved life jacket, but went under entangled in the anchor rope and was pulled overboard. Deceased was taking soundings from a boat and while attempting to anchor boat in the stream, he became 30, Married, Five dependents.)

Contributing Factors

Failure to have adequate lighting in area.

note overhead power line. note and warn crew of ex-Failure of supervisor to Failure of operator to isting hazard.

Inexperienced operator. Bud weather.

Hazardous road conditions. Failure to use chains.

Possible failure to keep Possible overloading or Filme to observe inlifting procedure. structions.

in clear.

Failure to keep clear of Possible improper working procedure. anchor line.

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Multiple Fractures and Internal Injuries Dam Construction

History

Contributing Factors

Failure to observe in-

herent hazards.

Possible inexperience.

work in high altitudes. (Iron worker, age 32, Married, ation. He stepped back and fell through a grating in aware of hazardous conditions and said he was able to operator move a safety ladder into place for install-Deceased was standing on top of tower watching crane had been warned at the routing wasety mesting to be top of cover, falling the distance of 72 feat. He One dependent.)

MANTHACTURENG

Grain-Mill Froducts Not Given

that the cord or light was delective, but did indicate Subsequent investigation did not reveal and latication ing short circuit caused the explosion. Investigation a running screw conveyor at the bottom of a flowr bin. the light was crushed by the conveyor and the resulthe lowered a trouble light on an extension and onto Deceased was killed as a result of an emplosion when also indicated that the air was heavily dust laden. (Flour Packer, age 32, Married, Six dependents.)

Explosive condition of

materials unsafely.

Introducing objects or

coronary condition and not necessarily browns on \mathfrak{b}_J Medical examination indicated that deall was here to undue overexertion. (Stationary Engineer, age 38, Married, Four dependents.)

Manufacturing of Beverages

Coronary Occlusion

Loccing Crushing Injuries of Head

Coroniry Occlusion.

Deceased saw it and ran with it and was struck in the head. attempting to get that was stuck in the deck. They were using an A-Frane and ent when operator attempted to pull the log loose. The left hold-back line broke causing A-brame to swing. While louding a truck deceased hooked a line on a lod (Hooker, age 34, Married, Four acpendents.)

Overloading of equipment. Should have been a center Victim ran wrong vay line on A.Frane.

clear.

Contributing Factors	Failure to fall snag. Failure to use caution
History	A dry snag was lodged in a tree that deceased was 'falling. As tree fell, sone ease loss and struck
Nature of Injury	Logging - cont. Crushing Injuries

instead of down. (Faller, Age 46, Single, No depenhim. He was not watching snag and had gone up hill dents.) Broken Neck

went over pile of slashing, as the front end dropped down he apparently was thrown from the cat breaking was not wearing a hard hat. (Cut skinner, age 29, his nech: There was no guard on cat and deceased Deceased was bringing the drag unto the landing. Married, Four dependents.) Failure to use signal Deceased walked over to untangle it, then stepped back and gave signal to go shead, welking back. It was rotten on one end and a piece of it hit him in the face nals. (Chokersetter, age 4 3, Married, Four dependents.) electric whistle system that had been provided for sig-The log was being dropped in by cable and it hung on a and side, breaking his neck. Deceased did not use an

him fell over knocking hard hat from his head and driving apparently did not hear tree coming or did not check timaround him. (Sawyer, age 42, Single, One dependent.) Savyer had started to top trees when another tree behind face into the saw. The man was working by himself and

rolled away striking him in the back as he turned away. Deceased was loading a truck equipped with a self B.K. loader. He had put a log on the truck but the log (Truck driver, Age 28, Married, Two dependents.)

Internal Injuries

Head Injuries

Broken Neck

railure to use caution. Lack of safety guards

Failure to wear hard hat. on cat.

rounding timber for snags. Disregard of instructions. Failure to get in clear. apparatus as provided. Failure to check sur-

ing procedure or improper Possible improper work-Possible inexperience. Possible failure to use of equipment. Working alene. keep in clear.

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Logging - cont.

Skull Fracture

there was no guard on cat and deceased was not wearing The tree was the tree caught on a dead tree pulling it over on top to be sure and trim all trees thoroughly and this had killing him instantly. The crew had been instructed being pulled by the top rather than the butt. Also, a hard hat. (General woods worker, age 51, Married, of the tractor. A limb or knot penetrated his skull Deceased was skidding a tree with a tractor when not been done on the tree being pulled. Four dependents.)

summoned. Medical evidence indicated that death was Deceased was working with partner on landing and he became ill. He died before medical aid could be due to overexertion which resulted in a Coronory Occlusion. (Logger, Age 55, Married, Two dependents.)

Coronary Occlusion

Crushing Injuries

Savmills Suffocation

pulling it over. Members of the crew shouted to him telling him to run down hill, however, he ran with skidding a log with winch line, log caught a tree Deceased was engaged in setting chokers and while (Chokersotter, age 32, Married, Four dependents.) the tree instead of away from it as instructed.

dust to a conveyor. Did not work from walk provided Deceased was working in fuel bin knocking down sawbut was working from bottom of bin. Sawdust caved covering him completely. No witnesses. (Laborer, age 19, Single, Two dependents.)

History

Contributing Ectors

Improper working procedure. Disregard of instructions Men should have worn hard Lack of safety guard on by swamper tractor. hats.

Strain or overexertion.

Failure to obey shouted Failure to watch for hazard.

command.

Failure to use safety Unsafe working prodevices provided. cedune.

Disregard of instructions. Assuming unsafe position.

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Sawmills - cont. Skull Fracture Crushing Injuries

Coronary Thrombosis

Fractures of Skull & Neck

History.

way, logs kroke loose on upper skidway. One log knocked him down and rolled over him. (Landing man, When taking a line out to hook it on a log of skidage 31, Single, No dependents.)

steam to the carriage. Tail sawyer walked around the crushing him between saw and log. Men had been told bumped or touched feed stick. Carriage jumped ahead to stay out of cage and away from feed stick. (Tail Saw was temporarily shut down because of small fire. head saw to sawyers cage to cross track and either Setter had ran to the fire and failed to shut off sawyer, age 55, Married, Two dependents.)

mation indicated death was due to a coronary condition Deceased died while at work. However, medical inforand not connected to the man's occupation. (Laborer, age 32, Single, No dependents.) Deceased walked between truck and heel boom. The boom hoist brake failed and the boom fell striking deceased in the head. Machine was not running. (Truck driver, age 70, Married.)

Planer Mills Crushing Injuries

became caught in revolving shaft, pulling him down into chine to do this, and it is believed that his clothing Deceased had told relief operator that he was going to had been instructed to shut off machine before working fill ink-well in back of trinmer. He did not stop masix inch opening between shaft and machine. Operator on or around it. (Trimmerman, Age 41, Married, Four dependents.)

Contributing Factors

Unsafe working procedure. Failure to check deck to see if it was secure.

Unsafe exposure to hazard. Disregard of instructions. Failure of setter to turn off steam while saw was Lack of safety device. Possible inexperience. down.

Coronary Thrombosis.

Disregard of instructions Lack of safety cables on not to work under boom. boom.

Failure to check brakes on hoist. Disregard of instructions. Servicing machine while in operation.

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Chemical Manufacture Chemical Burns

Oil Refining

Smelting and Refining of Metals Heart Attack

Heart Attack

Internal Injuries

Heart Attack

History

basement. Apparently precipitator valve opened spraying him with precipitated phosphate. He died of burns would not move. He was warned not to go to the basement. Shortly afterward, they heard a scream in the Deceased was helping operator to free a clogged flue with water and had put quite a bit in flue but it the following day. (Laborer, age 19, Single.)

Disregard of instructions.

Assuming unsafe position.

Contributing Factors

Fumes ignited, inflicting fatal burns. (Carpenter, age light a cigarette. Air was heavily laden with natural Deceased entered carpenter shop and struck a match to gas, possibly caused by a line leak from the stove. 46, Married, Four dependents.)

Failure to detect gas fumes. Failure to inspect appli-Possibly defective stove or defective gas line. ances for defects.

> (Repairman, age 46, Married, Six dependents. Man died of a heart attack while sitting in change house.

Heart attack only cause

given.

Heart attack.

Death was apparently due to pre-existing heart attack. Information available does not indicate undue or excessive strain or overexertion. (Laborer, age 43, Single, No dependents.)

Deceased had cleaned flue when he either slipped or (Helper, fell from walk along side of furnace to ground. witnesses, possibly man had become ill. age 58, Single, No dependents.)

No other known (Foreman, age 57, Married, One Death was attributed to a heart attack. contributing factors. dependent.

Unknown.

Heart Attack.

Nature of Injury	History	Contributing Factors
Smelting - cont. Coronary Thrombosis	The deceased died at work. There was no evidence of excessive strain or overexertion and he was known to have had a pre-existing heart condition. (Pipefitter, Married, One dependent.)	Pre-existing heart condition.
	TRANSPORTATION, COMMUNICATION & UTILITIES	
Trucking Not Given	Deceased was killed instantly when tractor and trailer unit that he was driving overturned. No other units known to be involved in the accident. Cause is still unknown. (Driver, age 32, Married, Four dependents.)	Unknovn.
Not Given	Deceased lost control of truck while driving down grade. Truck overtwrned killing him instantly. (Truck driver, age 46, Married, Five dependents.)	Possible excessive speed. Possible machanical failure of truck. Possible failure to main- tain equipment.
Not Given	Deceased was engaged in putting chains on his truck when he was struck and killed by a passing car. (Truck driver, age 41, Married, Five dependents.)	Possible reckless driving on the part of driver of automobile. Possible poor road conditions. Possible poor visability. Possible taking unsafe position.
Crushing Injuries	Deceased was attempting to put oil in master cylinder of dump truck and accidently tripped liner lever which lowers the truck box onto the frame of truck. He was crushed between box and frame. He had made no provisions for safety such as blocking the box up. (. Truck driver, age 25, Single, Two dependents.)	Failure to recognize existing hazard. Unsafe position. Possible improper supervision.

Nature of Injury	History	Contributing Factors
Bus Lines, Other than City & Suburban Crushing Injuries	Mechanic had jacked coach up so that he could go between the wheel and fender to make repairs. Evidently, frost coming out of ground had softened blacktop and jack went through surface letting the coach body down on the deceased. (Mechanic, age 51, Married, Two dependents.)	Environmental conditions.
Crushed Chest	While driving pickup truck on vet, icy highway, truck skidded off road and overturned killing the driver. (Shop Foreman, age 47, Married, Three dependents.)	Bad road conditions. Possible excessive speed.
Electric Utilities Electrocution	Employee had climbed on steel sub-station structure in de-energized area and apparently threw his right leg over angle support contacting energized 2400 Volt riser on south side of structure. There were no immediate witnesses to the accident. (Electrician, age 30, Married, Two dependents.)	Possible failure to anticipate hazard. Possible failure to use caution.
Electrocution	Deceased and fellow lineman were doing hot stick work on pole. Partner had just completed connection of cutout to energized 7200 Volt phase wire and as he changed positions on pole deceased evidently touched bottom of cutout with right hand and pulled guy wire into contact with bare neutral completing circuit through his body. Efforts made to revive him were unsuccessful. All safety equipment used, but he apparently had taken a position too close to the live conductor. (Lineman, age 27, Married, Six dependents.)	Possibly taking unsafe position.

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Utilities - cort. Internal Injuries

History

Contributing Factors

Disregard of safety orders.

Disregard of normal pro-

cedure.

Deceased was in act of removing secondaries from distriwith pole. Men had been instructed to determine condi-(Apprentice Lincoff one foot below ground level. Deceased was held at top of pole with his safety belt and consequently fell bution pole when secondary wire caught pole and broke tion of all poles before climbing. Company safety manuel stipulates such a precaution. man, age 26, Married, One dependent.

TRADE

Wholesale Sales Not Given

Retail General Merchandise Heart Attack

Retail Food Dealers Heart Attack

Retail Automobile Dealers Skull Fracture

Deceased was stricken with a heart attack while on his employers premises. There was no positive evidence of any contributing factors that would connect his death to the occupation. (Occupation not given, age ?,

Married, Two dependents.)

Deceased suffered a heart attack while at work and died approximately three weeks later. No known pre-existing heart condition or no evidence of undue or excessive strain. (Laborer, age & merital status, not given.) Deceased was thrown from his car when it went out of con- Possible excessive speed. excessive speed was the cause of the accident. (Salesman, trol on a curve. Investigating officers believe that age 51, Married, Three dependents.)

Apparently failure to maintain safe distance between Apparently failure to obcar and other vehicle. serve signal lights. Heart attack. way. He was killed instantly. (Salesman, age 61, Married,

Apparently excessive

speed.

not notice the truck was nearly stopped or did not notice

Deceased was driving behind a truck. He evidently did

the signal lights on the truck signaling for a left hand

after skidding 110 feet in a straight line down the hi-

No dependents.)

turn and as a result he ran into the back of the truck,

Heart Attack.

No other factors given.

Injury	
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Retail Auto. Dealers -- cont. Hemmorrhage Internal

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Eating & Drinking Places Suffocation

fallen at the used car lot and complained of a severe caused by internal hemmorrhage due to ruptured aortic pain in his side. No indication of excessive strain or overexertion. Death certificate stated death was ameurysm due to arteriosclerosis. Death occurred 72 hours after first complaint. (Car salesman, age 58, Deceased told the sales manager he had slipped and Married, One dependent.) Man and his wife were overcome by smoke. Building in which they were working burned after grease evidently caught fire on the kitchen stove. (Janitons, ages 67 and 68, No dependents.)

Coronary Occlusion

been the result of the man's labor. (A Bartender, age 46, Married, One dependent.) cause of a previous cardiac condition although shortly before he carried a heavy case up the basement stairs. Deceased collasped while at work and attempts made to Medical evidence indicated that occlusion could have of the fact that he should not do strenuous work berevive him proved to be futile. Deceased was aware

FINANCE, INSURANCE & REAL ESTATE

heart attack while at work. No indication of undue Deceased was employed as a carpenter and died of a or excessive strain. (Carpenter, age not given, Married, One dependent.)

Heart Attack Real Estate

History

Contributing Factors

Arteriosclerosis.

cause of fire or why the Possible failure to anvictims did not get out are apparently unknown. Information as to the ticipate hazard of collected grease. Possible panic.

Excessive strain or Pre-existing heart over-exertion. condition.

Heart Attack.

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State Natural Resources

Coronary Occlusion

Multiple Fractures Internal Injuries Highway

Coronary Thrombosis

Local

Education Not Given Coronary Thrombosis

History

GOVERNMENT

An autopsy was performed and death was attributed to Coronary Occlusion. (Field Deceased became ill at work and died before medical engineer, age 54, Married, One dependent.) aid could be summoned.

Deceased was mowing weeds on right of way with a self-(Mower operator, age 61, Married, tree stump causing mower to swinf around and go over propelled mower, when the sickle bar hooked a small a twelve foot bank. Two dependents.)

his occupation, it was necessary that he, on occasion, work long hours, with considerable exertion. Medical reports attributed the coronary condition to the exover an extended period of time. Also, by nature of posure to these factors. (Laborer, age 70, Married, Deceased was exposed to paint and other toxic fumes One dependent.)

a car on the fog bound highway. He was still on the wrong side of the road when he collided head-on with festival when the driver attempted to or had passed (Music teacher, age 36, Single, Deceased and some students were enroute to a music a transport truck. No dependents.)

heart condition, it is believed that probably the sponsible for the onset of the attack. (Janitor, Although there was no evidence of a pre-existing exertion connected with his routine work was reage 36, Single, No dependents.)

Contributing Factors

Heart disease.

Probable failure to see stump due to poor visability.

Exposure to toxic fumes. Strain or overexertion,

Poor visability. Excessive speed. Roads were wet.

Coronary Thrombosis.

Contributing Factors	
Histor	
Nature of Injury	

Other Local Natural Causes Local - cont.

Shock

& Internal Injuries

While enroute home from a neighboring city, de-61, Married.)

turning over several times. He died four days after the accident. (County Attorney, age 33, ceased went to sleep and went off of the road Married, Two dependents.)

MANUFACTURING-cont.

Smelting - cont.

Heart Attack

or overexertion as contributing factors. (Laborer, vestigation does not indicate any excessive strain Deceased died of heart attack while at work. Inage 56, Married, One dependent.)

Heart attack.

Arteriosclerosis.

(Plumbing & gas inspector, age

Medical examination indicated death was not pre-

cipitated by any injury but was attributed to

arteriosclerosis.

Fatigue.

27.

COMPARISON OF NEW FIRMS OVER TEN FISCAL YEARS (Net Increase Each Year Over Previous Year)

Fiscal Year	Plan I	Plan II	Plan III	Total
1947-48 1948-49 1949-50 1950-51 1951-52 1952-53 1953-54 1954-55 1955-56	9 -5 1 0 2 7 4 3 -0	543 655 663 453 115 -46 -109 213 25 -600	330 156 136 255 416 561 336 743 511 645	882 806 800 708 533 522 231 959 534 45
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NUMBER OF FIRMS CARRYING WORKMEN'S COMPENSATION INSURANCE (Ten Year Comparison)

Fiscal Year	Plan I	Plan II	Plan III	Total
1947-48 1948-49 1949-50 1950-51 1951-52 1952-53 1953-54 1954-55 1955-56	56 51 52 52 54 61 65 68 66	2,605 3,260 3,923 4,376 4,491 4,445 4,336 4,549 4,574 3,974	5,251 5,407 5,543 5,812 6,628 6,789 7,125 7,868 8,379 9,024	7,912 8,718 9,532 10,240 10,773 11,295 11,526 12,485 13,019 13,064

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INDUSTRY	TOTAL	Lost TIME INJURIES	No Lost Time Injuries	UNDETER- MINED
AGRICULTURE AND FORESTRY AGRICULTURE AGRICULTURAL SERVICES FORESTRY	1,050 1,012 8 30	<u>513</u> 491 7 15	480 468 1 11	55 51 4
MINERAL EXTRACTION METAL MINING COAL MINING NON-METALLIC MINING, HARD-ROCK MINING OTHER NON-METALLIC MINING & QUARRYING ROCK, SAND, & GRAVEL QUARRYING CRUDE PETROLEUM & NATURAL GAS PRODUCTION (INCL. OIL & GAS FIELD CONTRACT SERVICES)	2,149 1,005 32 69 18 48 977	1,053 669 23 10 8 16 327	959 249 9 59 10 29 603	137 87 - - 3 47
CONTRACT CONSTRUCTION GENERAL CONTRACTORS, BUILDING GENERAL CONTRACTORS, OTHER THAN BUILDING SPECIAL TRADE CONTRACTORS STRUCTURAL STEEL ERECTION PLUMBING, HEATING, & AIR CONDITIONING PAINTING & PAPER HANGING ELECTRICAL CONTRACTORS MASONRY, STONEWORK, PLASTERING, ETC. LINE CONSTRUCTION (ELECTRICAL OR T. & T.) ROOFING & SHEET METAL OTHER SPECIAL—TRADE CONTRACTORS	4 097 1,332 1,579 1,187 54 400 71 138 153 78 97 196	1,325 472 475 378 14 119 30 - 64 22 21 63	2,605 8C8 1,036 761 36 226 35 - 83 52 54 127	167 51 68 48 4 15 6 - 6 4
MANUFACTURING FOOD & KINDRED PRODUCTS ITEAT PRODUCTS DAIRY PRODUCTS FRUIT & VEGETABLE CANNING & PRESERVING GRAIN MILL PRODUCTS BAKERY PRODUCTS BAKERY PRODUCTS SUGAR CONFECTIONARY BEVERAGES HISCELLANEOUS FOOD PRODUCTS TEXTILE PRODUCTS LUMBER & WOOD PRODUCTS (EXCEPT FURNITURE) LOGGING SAMMILLS & PLANING MILLS PLYWOOD & VENEER PLANTS SASH & DOOR (INCL. MILLWORK) OTHER WOOD PRODUCTS FURNITURE & FIXTURES PAPER & ALLIED PRODUCTS PRINTING, PUBLISHING, & ALLIED INDUSTRIES CHEMICALS & ALLIED PRODUCTS PETROLEUM REFINING STONE, GLASS, & CLAY PRODUCTS CEMENT STRUCTURAL CLAY PRODUCTS CONCRETE, GYPSUM, & PLASTER PRODUCTS OTHER STONE, CLAY & GLASS PRODUCTS OTHER STONE, CLAY & GLASS PRODUCTS HETAL SMELTING, REFINING & ROLLING FABRICATED METAL PRODUCTS MACHINERY & MACHINE PARTS (EXCEPT ELECTRICAL) ELECTRICAL MACHINE EQUIPMENT & SUPPLIES TRANSPORTATION EQUIPMENT INSTRUMENTS & RELATED PRODUCTS MISCELLANEOUS MANUFACTURING INDUSTRIES	5,027 1,068 314 104 31 124 123 208 8 145 6 5 2,879 964 1,627 50 109 85 28 28 145 60 109 85 111 116 315 119 311 116 32 315 119 31 8 23 57 7	2,033 299 102 22 6 29 33 61 2 41 2 1 1,295 618 13 40 43 7 1 21 8 22 55 25 37 11 277 31 4 3 8 1 4	2,702 697 189 80 14 82 79 147 6 94 4 2 1,422 355 908 31 66 40 20 1 58 91 124 142 43 6 74 19 22 78 23 5 5 12 4 3 5	292 72 23 2 11 13 11 - 10 2 169 54 101 6 3 2 1 - 6 2 2 7 - 5 2 16 10 4 - 2

INDUSTRY	TOTAL	LOST TIME		Undeter- Mined
RANSPORTATION, CONTUNICATION, & UTILITIES	1,193	416	702	<u>75</u>
KAILWAY EXPRESS SERVICE	28	12	17	
LOCAL RAILWAY & BUS LINES	11	6	4	1
PUBLICLY OPERATED PRIVATELY OPERATED	3	2	. 1	. 1
TRUCKING & WAREHOUSING	<u></u> _623	255	322	46
RUCKING (EXCEPT LOG OR LUMBER HAULING)	220	86	126	8
ÇOLD STORAGE PLANTS	15	6	9	-
TRUCKING & STORAGE	231	108	102	21
Warehousing Grain elevators	10 147	4 51	5 80	1 16
OTHER COMBINED TRUCK & WAREHOUSING	-	<u> </u>	-	-
OTHER TRANSPORTATION	69	31	32	6
BUS LINES OTHER THAN CITY OR SUBURBAN	18	3	10	5
AIR TRANSPORTATION (COMMON CARRIER)	14	8	6	-
TAXI-CABS	32 5	20	11 5	1
Pipe-Line transportation (except natil. gas) Services allied to transportation	15	2	9	4
AIR TRANSPORTATION SERVICES	14	2	8	4
OTHER TRANSPORTATION SERVICES	1	-	1	: -
Telephone & Telegraph	91	14	74	3
ELECTRIC & GAS UTILITIES	226	56	158	12
PUBLICLY OWNED PRIVATELY OWNED:	146 80	30 26	106 52	10
WATER, HEAT & SANITARY SERVICES (INCL. PUBLICLY	-	-	<i>-</i>	-
& PRIVATELY OWNED OR OPERATED)			•	*
RRIGATION SYSTEMS	48	12	35	1
WATER SUPPLY SYSTEMS	41	13	26	2
SANITARY SYSTEMS	40	15	25	-
RADE	4,486	1,178	2,9 <u>31</u>	377
WHOLESALE SCRAP METAL SALVAGE	510 50	145 11	323	. 42
AUTOMOTIVE PARTS, TIRES, & ACCESSORIES	59	16	38	: 5
CHEMICALS, DRUGS, AND ALLIED PRODUCTS	6	2	4	=
Produce and food	103	24	68	11
ELECTRICAL GOODS AND APPLIANCES	14	2	11	1
HARRIAGE, AND BINESTING AND MEATING	48	12	32	4
HARDWARE, AND PLUMBING AND HEATING PETROLEUM BULK TANK STATION	85	: 24	55	6
PACKERS AND SHIPPERS OF FRESH FRUITS AND VEGETABLES	3	1	2	-
SALES BRANCHES, AGENTS, AND BROKERS	31	14	14	3
LIVESTOCK AUCTÍON COMPÁNIES, INCL. YARDS & FEEDING	64	20	36	8
OTHER WHOLESALE TRADE	74	19	24	: 4
WHOLESALE & RETAIL TRADE COMBINED	463	129	300	34
LUMBER & BUILDING MATERIAL DEALERS DAIRIES	295 162	92 34	180 118	23 10
OTHER WHOLESALE & RETAIL TRADE COMBINED	6	3	2	10
RETAIL	3.513	904	2,308	301
RETAIL GENERAL MERCHANDISE	304	7 5	197	32
RETAIL FOOD & LIQUOR STORES (INCL. DAIRY PROD.)		125	373	: 40
AUTOHOTIVE DEALERS (INCL. PARTS & ACCESSORIES)	1,064	217	734	113
RETAIL CLOTHING (INCL. SHOES)	11 144	2 35	9 100	. 9
FURNITURE, APPLIANCES, RADIO, T.V. EATING AND DRINKING PLACES	489	209	238	: 42
GASOLINE FILLING STATIONS	232	62	155	. 15
HARDWARE, IMPLEMENT & MACHINERY DEALERS	586	131	412	. 43
OTHER RETAIL TRADE	91	30	· 56	. 5

TOTAL	LOST TIME	No Lost Time Injuries	Undeter-
<u>76</u> 60 16	20 13 7	48 41 7	- <u>8</u> 6 2
1,301 242 122 102 20 41 179 125 13 14 104 342 311 31 25 29 4 38 1	410 89 33 29 4 16 49 40 5 4 30 98 86 12 15 7 4 11	8 21 117 79 8 9	115 16 4 3 1 4 13 24 - 1 11 45 40 5 1 2
1,647 671 26 94 155 84 229 83 976 75 66 271 396 6	491 201 5 40 30 25 64 37 290 23 13 70 137 2	1,028 429 18 49 115 56 151 40 599 45 48 173 229 4	128 41 3 5 10 3 14 6 87 7 5 28 30 -
21,026	7,439	12,233	1,354
	- 76 60 16 1,301 242 122 102 20 41 179 125 13 14 104 342 311 31 25 29 4 38 1 1,647 671 26 94 155 84 229 83 976 75 66 271 396 6 158	INJURIES 20 60 13 16 7 7 1,301 410 242 89 122 33 102 29 20 4 41 16 179 49 125 40 13 5 14 4 4 104 30 342 98 311 86 31 12 25 15 29 7 4 4 4 38 11 1 1 1 1 1 1 1 1	TOTAL LOST TIME INJURIES TIME INJURIES -76 20 48 60 13 41 16 7 7 1,301 410 799 242 89 137 122 33 85 102 29 70 20 4 8 41 16 21 179 49 117 125 40 79 13 5 8 14 4 9 104 30 63 342 98 199 311 86 185 31 12 14 25 15 9 29 7 20 4 4 - 38 11 21 1 1 - 1,647 491 1,028 671 201 429 26

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HINERAL

^{1 -} INCLUDES UTILITIES THAT ARE PUBLICLY OPERATED

GEOGRAPHIC LUCATION BY COUNTY AND MAJOR INDUSTRY JULY 1956-JUNE 1957 COUNTY	Per Cent	TOTAL	AGRICULTURE AND AGRICULTURAL SERVICES	Mincral Extraction	Contract Construct ion	HANUFACTURING	TRANSPORTATION, CGERTUHICATIONS AND UTILITIES 1	TRADE	FINANCE, INSURANCE, AND REAL ESTATE	Service	Government
MISSOULA	8.6	1,818	28	23	280	842	66	372	4	103	100
Musselshell	.5	103	4	48	8	-	8	22	-	: 6	
Park	2.0	426	32	3	63	168	17	. 7 5	_	: 29	
PETROLEUM	.1	21	6	6	1	3.	1	1	_	: -	
PHIL 10S	.4	81	. 4	8	18	4	8	29	-	. 3	
Pondera	.8	164	15	. 22	25	12	18	55	1	6	
Powdle River	.2	32	. 9	6	5	-	2	5	-		5
PoweLL	1.5	322	: 45	95	30	87	7	27	-	6	25
PRAIR:E	.2	36	1	9	5	_	3	12	_	1	5
RAVA LI	1.0	. 208	17	4	25	93	11	38	-	4	16
RICHLA ID	1.1	239	1	10	58	80	17	46	-	12	15
ROOSEVELT	.9	188	. 1	59	47	7	18	36	-	2	18
Rosebuo	.6	130	12	44	26	10	7	20	-	4	7
SANJERS	2,6	543	3	25	234	228	7	19	-	14	13
SHERIDAN	.4	94	4	15	19	6	11	26 :	-	3	11
SILVE 100	3.1	1,700	9	637	245	244	73	311	9	102	7 0
STILLWATE	.7	147	9	74	9	12	6	23	-	. 8	6
SWEET UPASS	.2.	38	9	1	9	2	2	6	-	-	9
TETON	.7	156	30	23	12	7	23	40	-	6	15
Toole	1.3	280	8	47	72	59	32	42	1	8	11
TREASURE	.1	17	2	3	3	_	3	1		1	4
VALLEY	1.8:	380	26	11	199	7	24	83	-	6	24 .
WHEATLAND	•3	65	11	4	7	2	8	21	-	3	10
VIEAUX	.5	108	1	68	18	11	5	3	-	-	2
YELLOWSTONE	13,2	2,773	31	135	564	569	215	849	12	266	132
OUT OF STATE	\cdot^{A}	83	-	18	13	19	14	7	-	12	-
NOT GIVEN	.1	8	1_	1	1	3				2	
TOTAL	.oo.o	21,023	1,050	2,156	4,097	5,021	1,193	4 486	76	1,301	1,647
	:							:			:

1 - Includes Utilities that are publicly operated -33-

Total:	UNCLASSIFIED INSUFFICIENT DATA	FITSCELLANEOUS AGENCIES	EIVIRONAENTAL CONDITIONS	HOTION OR PRESSURE	ANIMALS	FLYING PARTICLES, UNASSIGNED	ELECTRICAL APPARATUS	HECH. POWER TRANSMISSION APPARATUS	PUMPS, PRIME HOVERS	BOILERS, PRESSURE VESSELS	TREES, LOGS, LUABER	CONTAINERS	LADDERS	WORKING SURFACES	CHEMICALS, HOT OR INJURIOUS SUBST.	HAND TOOLS	VEHICLES	Conveyors	HOISTING APPARATUS	ELEVATOR	MACHINES	AGENCY BY ACCIDENT TYPE ALL INDUSTRIES JULY 1956 - JUNE 1957 AGENCY
100.1	1.4	3	 	2,4:	1.6	6,0	.	· U	•4	·ω	7.5	4.8	1.3	15.3	ى 8.	13.0	رن ن	ۍ.	1.4	.2	6.7	PER CENT
21,026	294	1 1 13	<u>-5</u>	497	335	1,269	98	105	88	54	1,581	1,018	273	3,220	796	2,739	1,148	97	290	41	1,409	TOTAL
9,361	 - 1.)	5.75 5.75	:.,	ın.	142	6	13	29	. 39	23	1,071	324	17	79	27	2,493	233	မ္	168	17	1,050	STRUCK BY OR STRIKING AGAINST
1,386	42	, E	,	ı	4	1	6	64	30	6	119	ਹੈ	ω	7	 دير	41	103	41	77	. 13	227	CAUGHT IN, ON, OR BETWEEN
4,326	7	5	رن رن	75	115			 	 		134	65	240	3,114	ω	64	: 159	12	19	7	35	SLIPS AND FALLS
583	5		1			i	1	t	I	1	 I	ı	 i	 <u>, .</u>	1		567	 بـر		 1	ω	ACCIDENTS HIVOLVING HOVING HOTOR VEHICLES
2,612	!	1 000	_	308	U		8	11	10	8	253	567	. 12	17	. 2	61	66	8	19	 N	77	STRAIN OR OVER- EXERTION
546	i i -	(p	7.7		1	1	U.	,	2	: 11	ı	. سر		2	331	. 78	6				11	CONTACT WITH TEMPERATURE EXTREMES
408	I_	- -		. 2	2	,		,	1	ı	2		 I	1	383	ъ	ıı	1	1	I	1	INHALATION, ABSORPTION, AND SWALLOWING
66	144		₽	1	ı	,,,,			*	1	:	1	1	1	<u>~</u>	-	1	1	 -	ı	ω	CONTACT WITH ELECTRIC CURRENT
267	1.42	j.	. 2	1	1	ı	ď	•	о. С	6	i	14	ı	1	28	1	4	1		1	1	EXPLOSION, FLASH-BACK, ETC.
1,287		ب	1			1,262	1	ı	ı	1		1	1	1	20	1	1	1	1	1	1	FOREIGN BODY IN EYE
184	5	69	uı	17	64	₽	ı	i	1	ı	2	<u>⊢</u>	₽	ı	2	1	10	1	2	N	ω	OTHER, NOT STATED OR UNCLASSIFIED

TOTAL	OTHER AND NOT STATED	HEART ATTACK, DISEASE, OR STRAIN	FOREIGN BODY IN EYE	EXPLOSION, FLASH-BACK, ETC.	CONTACT WITH ELECTRIC CURRENT	INHALATION, ABSORPTION, SWALLOWING	CONTACT WITH TEMPERATURE EXTREMES	STRAIN OR OVEREXERTION	INVOLVING HOVING HOTOR VEHICLES	FALLS AND/OR SLIPS	CA UGHT IN, ON, OR BETWEEN	STRUCK BY OR STRIKING AGAINST	ACCIDENT TYPE BY HAJOR INDUSTRY JULY 1956-JUNE 1957 ACCIDENT TYPE
 100,0	1.1	. 2	6.1	•		1.9	2.6	12.7	2.7	20.8	6.5	44.5	PER CE:IT
 350,12	232	32	1,287	130	53	408	546	2,677	578	4,366	1,358	9,359	TOTAL
1,050	18	ı	62	0	ı	0	19	103	55	309	65	407	AGRICULTURE ADD AGRICULTURAL SERVICES
. 2 , 156	25.	ب	129	19	ω	50	51	193	73	330	238	1,043	Mineral Extraction
4,097	33	0	332	22	9	104	105	466	114	827	186	1,893	Contract Construction
570,3	1 135 155	12	307	24	13	76	133	585	86	967	375	2,406	MANUFACTURING
14 10 10	27	2	53	ω	13	22	18	184	71	282	73	440	TRAMED ATATION, CONDUMINATIONS, AND UTILITIES
 15 13 14 14 14 14 14	1 47	(J)	256	25	10	92	128	705	98	853	262	2,013	TRACT
 C)	; 	ы		ı	1	N	1	10	7	24	0	24	FIRMS
TGC, 1	[F]	N	74	12	4	S	56	187	11	274	76	559	SERV!(E
1,647	3	ហ	73	14	ь	31	36	244	63	500	77	574	GOVERNMENT

								******	1						******* *******************************
* N. O. C NOT OTHERWISE CLASSIFIED	PERCENT	TOTAL	OTHER OR NOT STATED	FOREIGN BODY IN EYE	HEART DISEAUE, STRAIN, CEREBRAL, HEMORRHAGE, STRUKE, LTC.	BRUISES AND CONTUSIONS	INDUSTRIAL DISEASE	HERNIA	FRACTURES	CRUSHING INDURIES	STRAINS, SPRAINS, DISLOCATIONS	CUTS, LACERATIONS, PUNCTURES, ETC.	BURNS AND SCALDS	AMPUTATION, LOSS OF, LOSS OF USE OF	NATURE OF INJURY BY BODY LOCATION JULY 1956 - JUNE 1957 PART JULY 1956 - BODY NATURE OF INJURY
		1CO,1	4	9.9	'n	15.8	1.6	1.5	8.9	2.8	27 , 4	22.3	4.6	Ď	PER CENT
	100,1	21,523	100	2,080	40	3,319	335	317	1,864	594	5,760	4,683	963	124	TOTAL
j	12,0			2,030	1	78	14	1	1	1	!	156	291	4	Eyes
;	7.6	1-1	i di		۲۷	181	25	1	146	N	179	740	151	ب ب ب	HEAD, FACE AND
1	17,5	(.) () و ر	107	į	i	201	ر	17	74	<u>⊢</u>	3,218	 [J	a r.	•	EACK NO SPINE
:	7 7		 ! 5	* 3	57.	408	23	2:36	374	10	282	50	4	Н	7504
;	7.6				:	44.4	30	1	162	11	519	÷; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	E.		Time
	9,2	1,03	i	,	i	25.5	7,	2	16.0	3.7	285	572	(V)	1	Them of the sts
	 	t) -	i :	:	1	(J)	80	⊢	(S)	A. C.C.	**	1,83	3	ō	17•, 15 g.
	8.7	4.	: -1		. 1	000	25	۰	165	ιC	÷55	363	49	4	i.e. :
			* * * * * * * * * * * * * * * * * * * *		1		땅.	t	277	2.	ű3%	<u>با</u>	55	1	PELT OF A KLES
	.0	-',	<u>.</u>		•	<u>⊢</u> ' ⊢	9 .	1	33	S	3	30	ı		rocs
	2.4	507	ر نا	:	- 1	<u>د</u> ر د د د د د د د د د د د د د د د د د د	9	;	11	13	15	23	35	₽	BOSY MANGER OR NOT STATED

STATISTICAL STATEMENT FOR YEAR ENDING JUNE 30, 1957

ALL PLANS	85	106 20,834	21,026	17.402	\$ 22,663.75	744,698.98	625,022,68	176,704,64	2,033,478.63	1,128,787.48	44, 197. 14 56, 678.86	7,500.00	\$5,271,692.17
PLAN III	36	36	11,718	10,147	\$ 9,465.00	309,847,43	261,000,38	113,813.92	1,306,105.75	522,093.82	56,678.86	1,000.00	\$3,045,116.73
PLAN II	23	37 7,181	7,21,2	6,125	\$ 3,300.00	93,108.15	202,387.20	42,568.72	503,173.63	273,112.18		3,500.00	\$1,389,841.38
PLAN I	56	33 2,007	2,066	1,130	\$ 9,898.75	24,004,43	161,635.10	20,322.00	224,199.25	333,581.48		3,000.00	\$836,734.06
	Number Fatal Accidents Number Permanent Total Accidents		Total Number Accidents Reported	Number Accidents No Compensation Paid	Disbursed for Funeral Expenses	Disbursed for Medical Axpenses Disbursed for Hospital Expenses	Disbursed for Fatal Accidents	Disbursed for Permanent Total Disability	Disbursed for Permanent Partial Disability	Disbursed for Temporary Total Disability Disbursed for Temporary Partial Disability	Disbursed for Hearings, Proceedings, and Medical Examinations	Disbursed for Second Injury Fund	Total Disbursed

DEPARTMENT OF SAFETY

During the fiscal year the Department of Safety has conducted safety inspections at various places of employment in the State; including quartz (metal) and coal mines; conducted inspections of high-pressure and steel boilers; conducted examinations of applicants of engineer licenses; issued license renewals and conducted accident investigations.

The department collected \$5,236.00 in license fees, \$14,150.00 in boiler inspection fees, and \$31,186.24 in safety inspections fees for a total of \$50,572.24. 3,206 licenses and license renewals were issued; 2,262 boiler inspections were conducted; 3,998 general safety inspections were conducted; 77 quartz (metal) mines were inspected; 101 coal mines were inspected and 57 investigations of serious and fatal accidents were performed. The inspection personnel travelled a total of 194,161 miles throughout the State of Montana in the carrying out of their duties. The operational expenses of the department totaled \$67,976.14. This total comprises the salaries and operating expenses of the department personnel, and does not include the administrative costs of stationery, certificates, etc.

A committee appointed last last year to compile a safety code for the Construction Industry completed the project and the code is now in effect.

The problems and activities of the Safety Department have been the same basically, as for the previous reporting period. The investigations of accidents, have, as in the past, been confined almost entirely to those of a fatal nature.

The charts on the following pages show statistically the work of the department on a county basis.

BUREAU OF SAFETY SUMMARY OF INSPECTIONS JULY 1956-JUNE 1957	GENERAL SAFETY INSPECTIONS	LOGGING, SAWHILL, ETC. INSPECTIONS		COAL ITINE INSPECTIONS		ACCIDENT INVESTI- GATION
BEAVERHEAD	63	1	7		32	
BIG HORN	54				24 .	
BLAINE	60			6	18	
BROADWATER	15				15	
CARBON	54			17	27	
CARTER	7				1	
CASCADE	411		2	8	188	4
CHOUTEAU	108				13	
Custer	81			3	54	1
DANIELS	55				9	
Dawson	175			1	38	1
Deer Lodge	43	1	1		105	3
FALLON	26				7	
FERGUS	186		2	2	63	
FLATHEAD	74	41	1		150	3
GALLATIN	120	5	2		148	1
GARFIELD	42				6	
GLACIER	45			:	57	1
GOLDEN VALLEY	5	:			21	
GRANITE	10		3		14	
HILL	193			2	46	2
Jefferson	20	1	19		24	
JUDITH BASIN	51				17	
LAKE	26	15			92	2
Lewis & Clark	114	7	2		238	6
LIBERTY	42				4	
LINCOLN	21	17			44	4
HADISON	41		1		15	1
McCone	24				9	
HEAGHER	14	2			7	
HINERAL	10	6	:		10	2
HISSOULA	110	19	1		168	3
MUSSELSHELL	36	1		40	15	1

73 2 7 31
7
31
1
50 1
6
75 1
34
15 1
17
47 3
16
231 15
10
7
14
74
2
18
17
6
<u> 194 _ 1</u>
2,626 57

Red Lodge, Montana August 16, 1957

Industrial Accident Board Helena, Montana

Gentlemen:

In accordance with the provisions of the State Coal Mining Code, I herewith submit my report as State Coal Mine Inspector for the Fiscal year ending June 30, 1957.

GENERAL INFORMATION

The total tonage mined shows a decrease of 400,685.23 tons from the 1955-56 total. This is due mostly to further curtailment of production at the Northwestern Improvement Company Mine at Colstrip, and the closing of the Republic Coal Company Mine at Klein.

The Cahr Plant at Red Lodge is being constructed by the Kol-Kruds Company, and it is expected that it will be in operation during the winter months. It will probably be some time before it will have a noticeable effect on the coal industry in the State, but we feel that it is a step in the right direction, and in time will mean a lot to the development of Montana's resources.

The power plant which is being constructed at Sidney is expected to use lignite coal from strip pits which are being opened near Savage.

FATAL ACCIDENTS

Mr. Samuel Barrett was fatally injured about 11:50 a.m., March 11, 1957, by a fall of overhanging rib coal and rock in No. 6 room, $12\frac{1}{2}$ south (right, back) entry.

Mr. Barrett was 44 years of age and had 26 years of mining experience, but he had only been employed in the Roundup No. 3 Mine since November 26, 1956. He is survived by his wife and two dependent children.

Each coal mine in the State is inspected by the Coal Mine Inspector of the U.S. Bureau of Mines in close co-operation with the State Coal Mine Inspector for the promotion of safety in the coal mines in Montana.

ACKNOWLEDGEMENTS

For assistance received from the members of the Industrial Accident Board, and for the co-operation of the U.S. Bureau of Mines, Coal Mine Inspectors, United Mine Workers Safety Committees, Mine Supervisors and employees, I express my thanks and appreciation.

Respectfully submitted,

/s/ Loren H. Newman
State Coal Mine Inspector

DATA OF THE INDUSTRY

Number of Mines Reporting......39

Bituminous Mines - Mechanized

Number of tons produced	313,758.41	tons
Value of coal at mines Number of men employed	\$1,612,505.37	
Man days	352 48,937	
Average days per man	139	
Permissible powder used	16,100	lbs.
Black powder used	3,000	
Amount of coal blasted by cardox		
or airdox	197,293.67	tons
Bituminous - Hand Minin	7	
Number of tons produced	11,497.85	tons
Value of coal at mines	\$85,307.68	
Number of men employed	27	
Man days	4,506	
Average working days per man	166.9	
Black powder used	6,700	
Permissible powder used	1,700	lbs.
Lignite - Underground		
Number of tons produced	20,553.44	tons
Value of coal at mines	\$82,620.35	
Number of men employed	32	
Average working days per man	147.1	
Man days	4,708	
Permissible powder used	10,600 24,100	
Black powder used	24,100	lbs.
Strip Mines - Lignite		
Number of tons produced	331,009.70	tons
Value at mines	\$997,344.78	
Number of men employed	7 5	
Man days	12,266	
Average working days per man	163.5	1 la -
Dynamite used	160,931	TDS.

1

676,819.40 \$2,777,778.18

Fatal Accidents

Total tonage all mines
Total value at mines

In accordance with the provisions of Quartz Mining Laws of the State of Montana, a report of the Quartz Mine Inspector is respectfully submitted for the fiscal year ending June 30, 1957.

Inspections were made on 77 locations in 17 counties and included smelters at Great Falls, Anaconda, and East Helena. Inspected also, was the cement plant at Trident, and the aluminum plant at Columbia Falls.

Investigations were made on most death cases and the statistical data of the inspections and investigations, as well as general accident statistics, will be summarized by the Bureau of Safety and Statistical Department of the Board.

Some curtailment of mining activities was noted, especially in the last few months, and was due to a great extent to the decrease in market prices, etc. or the cost of development of new mines or deposits.

Futalities were down to 15 from a total of 21 a year ago. The most common factor in death was ground falls. Over half the total of deaths reported were due to this cause.

The employers and employees of the industry have shown continued interest and cooperation in any attempt to improve the working conditions and working practices in the industry. They are to be commended for their efforts and attitude.

/s/ State Quartz Mine Inspector





